

Amendments to the Specification

Kindly amend paragraph 1, as follows:

This application is a divisional of U.S. Application No. 09/911,498, filed July 25, 2001, now U.S. Patent No. 6,720,799 B2, which claims the benefit of U.S. Provisional Patent Application No. 60/260,924, filed January 11, 2001.

Kindly amend the ABSTRACT OF THE DISCLOSURE as follows:

~~The present invention relates to a replica network for linearizing switched capacitor circuits. A bridge circuit with a MOSFET resistor disposed in a resistor branch of the bridge circuit is provided. A noninverting terminal of an operational amplifier is connected to a first node of the bridge circuit and an inverting terminal of the operational amplifier is connected to a second node of the bridge circuit. The second node is separated from the first node by another node of the bridge circuit. An output of the operational amplifier is provided to a gate terminal of the MOSFET resistor and to the gate terminal of the MOSFET switch in a switched capacitor circuit, thereby controlling the resistance of the MOSFET switch so that it is independent of the signal voltage. In this manner, the replica network of the present invention linearizes the switched capacitor circuit. In this manner, the replica network of the present invention linearizes the switched capacitor circuit.~~

A switched capacitor circuit having an integrator, a switch, a capacitor, a field effect transistor, and a network. The switch is connected to the integrator. The capacitor is connected to the switch. The field effect transistor is connected to the capacitor. The network is connected to a gate terminal of the field effect transistor. The network is

configured to control a resistance of the field effect transistor in response to variations in
an input signal voltage received at the field effect transistor.